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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,473	12/23/2003	Thomas Sean Houlihane	550-499	8029

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EXAMINER

WALLING, MEAGAN S

ART UNIT PAPER NUMBER

2863

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/743,473	HOULIHANE, THOMAS SEAN	
	Examiner	Art Unit	
	Meagan S. Walling	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 18, 22-28, 31, 42 and 46 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8-17, 19-21, 29, 30, 32-41, 43-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/15/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7, 18, 22-28, 31, 42, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Burgun et al. (US 2004/0111252).

Regarding claim 1, Burgun et al. teaches receiving configuration data used to configure the representation of the device (par. 28); and generating the testbench with reference to the configuration data and a first set of templates defining the test environment (par. 32).

Regarding claim 2, Burgun et al. teaches generating the representation of the device with reference to the configuration data and a second set of templates defining the representation of the device (par. 29).

Regarding claim 3, Burgun et al. teaches providing a processing tool having access to the configuration data and the first and second sets of templates, the steps (b) and (c) being performed by the processing tool (par. 78).

Regarding claim 4, Burgun et al. teaches that the processing tool is operable independent of a language produces by the processing tool from each template (par. 150).

Regarding claim 7, Burgun et al. teaches that the device is a bus interconnect block (par. 88).

Art Unit: 2863

Regarding claim 18, Burgun et al. teaches that the representation of the device is formed from constituent blocks and the second set of templates defines the representation of the device and its constituent blocks (par. 14).

Regarding claim 22, Burgun et al. teaches a computer program produce comprising code portions operable to control a computer to perform the method (par. 1).

Regarding claim 23, Burgun et al. teaches receiving a configuration data specifying predetermined attributes of the one or more components (par. 28); employing a processing tool to generate the testbench with reference to the configuration data and a first set of templates defining the test environment (par. 32); and employing the processing tool to generate the representation of the device with reference to the configuration data and a second set of templates defining the representation of the device (par. 29).

Regarding claim 24, Burgun et al. teaches a computer program comprising code portions operable to control a computer to perform the method (par. 1).

Regarding claim 25, Burgun et al. teaches logic operable to read the configuration data used to configure the representation of the device (par. 28); and generation logic operable to generate the testbench with reference to the configuration data and a first set of templates defining the test environment (par. 32).

Regarding claim 26, Burgun et al. teaches that the generation logic is further operable to generate the representation of the device with reference to the configuration data and a second set of templates defining the representation of the device (par. 29).

Art Unit: 2863

Regarding claim 27, Burgun et al. teaches a processing tool having access to the configuration data and the first and second sets of templates, the generation logic being provided by the processing tool (par. 78).

Regarding claim 28, Burgun et al. teaches that the processing tool is operable independent of a language provided by the processing tool from each template (par. 150).

Regarding claim 31, Burgun et al. teaches that the device is a bus interconnect block (par. 88).

Regarding claim 42, Burgun et al. teaches that the representation of the device is formed from constituent blocks and the second set of templates defines the representation of the device and its constituent blocks (par. 14).

Regarding claim 46, Burgun et al. teaches a logic operable to read a configuration data specifying predetermined attributes of the one or more components (par. 28); a processing tool operable to generate the testbench with reference to the configuration data and a first set of templates defining the test environment (par. 32); and the processing tool further being operable to generate the representation of the device with reference to the configuration data and a second set of templates defining the representation of the device (par. 29).

#### *Allowable Subject Matter*

Claims 5, 6, 8-17, 19-21, 29, 30, 32-41, and 43-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2863

The primary reason for the indication of allowability of claim 5 is the inclusion of the limitation that the representation of the device is provided in a first language type and at step (b) a part of the testbench defined by a number of the templates in the first set is generated in a second language type different to the first language type. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 8 is the inclusion of the limitation of employing a simulation tool to run a model of the data processing apparatus using the representation of the device and the testbench; wherein the first set of templates includes a master template defining a master engine coupled to a bus and operable during running of the model to generate test stimuli for input via the bus to the representation of the device. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 13 is the inclusion of the limitation of employing a simulation tool to run a model of the data processing apparatus using the representation of the device and the testbench; wherein the first set of templates includes a slave template defining a slave engine coupled to a bus and operable during running of the model to generate response signals in reply to test stimuli received from the representation of the device. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 19 is the inclusion of the limitation that there are a number of different component types, and the predetermined attributes

Art Unit: 2863

specified by the configuration data indicate the component type for each of the one or more components. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 20 is the inclusion of the limitation that the device is a bus interconnect block, and wherein one of the component types is a master type, and for each of the one or more components which is a master type, the predetermined attributes identify connections to any slave components within the one or more components that that master type component is connected to. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 29 is the inclusion of the limitation that the representation of the device is provided in a first language type and during generation of the testbench by the generation logic part of the testbench defined by a number of the templates in the first set is generated in a second language type different to the first language type. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 32 is the inclusion of the limitation of a simulation tool operable to run a model of the data processing apparatus using the representation of the device and the testbench; wherein the first set of templates includes a master template defining a master engine coupled to a bus and operable during running of the model to generate test stimuli for input via the bus to the representation of the device. It is this

Art Unit: 2863

limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 37 is the inclusion of the limitation of a simulation tool operable to run a model of the data processing apparatus using the representation of the device and the testbench; wherein the first set of templates includes a slave template defining a slave engine coupled to a bus and operable during running of the model to generate response signals in reply to test stimuli received from the representation of the device. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 43 is the inclusion of the limitation that there are a number of different component types, and the predetermined attributes specified by the configuration data indicate the component type for each of the one or more components. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art that makes these claims allowable.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meagan S. Walling whose telephone number is (571) 272-2283. The examiner can normally be reached on Monday through Friday 8:30 AM to 5 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msw



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